

torial regarding a forecast issued by the Weather Bureau at Washington on June 29:

The Weather Bureau's prediction made on Monday last that there would be a break in the warm wave on Thursday evening came true and was a splendid exhibition of what might be called "long-distance predicting." The sudden change from the almost unbearable heat and humidity that prevailed during the day was most agreeable and invigorating. The heavy shower aided materially in bringing about a more comfortable condition of affairs.

**BOSTON FORECAST DISTRICT.\***  
[New England.]

The month as a whole was warm and dry, and at the close the drought was being severely felt in all sections. There were no high winds or gales on the coast and no storm warnings were issued.—*J. W. Smith, District Forecaster.*

**NEW ORLEANS FORECAST DISTRICT.\***  
[Louisiana, Texas, Oklahoma, and Arkansas.]

The month was warm and precipitation was deficient over the greater portion of the district. No general storms occurred on the west Gulf coast and no storm warnings were issued.—*I. M. Cline, District Forecaster.*

**LOUISVILLE FORECAST DISTRICT.\***  
[Kentucky and Tennessee.]

Temperature averaged about normal, and, except in scattered localities, precipitation was somewhat below normal. The greater portion of the rainfall occurred in the first decade of the month.—*F. J. Walz, District Forecaster.*

**CHICAGO FORECAST DISTRICT.\***  
[Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas, and Montana.]

Temperature conditions were unimportant. Rainfall was above normal practically over the whole district, the excess being the most decided in the middle Missouri Valley. The rains were as a rule successfully forecast. Storm warnings were issued on the morning of the 19th, and the warnings were verified at a majority of the Lake stations. Frost warnings were issued for the lowlands of Michigan and Wisconsin on the 1st, 9th, 10th, 11th, and 14th. Freezing temperature was reported in the cranberry marshes of Wisconsin on four of these dates, and in portions of Michigan on two. The cranberry marshes were flooded, and damage from frost was consequently averted.—*H. J. Cox, Professor and District Forecaster.*

**DENVER FORECAST DISTRICT.\***  
[Wyoming, Colorado, Utah, New Mexico, and Arizona.]

The mean temperature was considerably lower than usual, except in south-central Colorado. Precipitation was in excess in the northwestern half and deficient in the southeastern half of the district. In south-central Colorado the long-standing drought was unbroken.—*F. H. Brandenburg, District Forecaster.*

**SAN FRANCISCO FORECAST DISTRICT.†**  
[California and Nevada.]

The month was one of continued cool weather and, until the last week, the usual summer afternoon high temperatures were missing. In Nevada unsettled weather continued until the middle of the month. The only coast disturbance appeared on the 20th. Southwest storm warnings were displayed and verified.—*A. G. McAdie, Professor and District Forecaster.*

**PORTLAND, OREG., FORECAST DISTRICT.†**  
[Oregon, Washington, and Idaho.]

As usual June was a quiet month. Temperature was unusually low in eastern Oregon and southern Idaho. There was a marked excess in rainfall in southern Idaho and a marked deficiency in the Willamette Valley and the Sound country. No wind storms occurred.—*E. A. Beals, District Forecaster.*

**RIVERS AND FLOODS.**

As has been frequently remarked, June is preeminently a month of floods, and those of the present month so far exceeded the majority of their predecessors in extent or duration, or both, that they are entitled to take front rank with the great floods of 1844, 1897, and 1903. They were probably not quite so great when measured by actual water stages as the floods of these former years, but they were equally if not more extensive, and were doubtless greater if measured by their duration and by the amount of losses and damage sustained.

At the end of the month several of the rivers of the Mississippi watershed, including the lower Mississippi, were still in flood. A number of special reports have not been received and it is therefore thought best to postpone for another month the description of these floods. Another report that will also appear at a later date is one on the annual rise of the Columbia River for the year 1908.

The Trinity River of Texas continued in flood thruout its entire length during the month, and it did not fall below flood stage until July 5. The crest of the Brazos River flood reached Booth, Tex., on June 6. A report of this flood covering essential points was included in the MONTHLY WEATHER REVIEW for May, 1908. The crest stages of the Trinity River from Long Lake to the mouth were the highest on record, especially at Long Lake, where the maximum stage of 51.8 feet, 16.8 feet above flood stage, occurred on June 4.

Heavy rains during the first few days of the month over the northern Rocky Mountain districts were followed by destructive floods in all streams of western Montana, eastern Idaho, and northern Wyoming. No river and flood service is maintained on those rivers and detailed reports are therefore not available. The losses and damage, while very large, were of the usual character, with the railroads as the greatest sufferers.

East of the Mississippi River there were no floods during the month, except in some of the smaller streams of New York, where heavy rains about the middle of the month did much damage. The Ohio River was at moderate stages thruout the month.

The highest and lowest water, mean stage, and monthly range at 213 river stations are given in Table IV. Hydrographs for typical points on seven principal rivers are shown on Chart I. The stations selected for charting are Keokuk, St. Louis, Memphis, Vicksburg, and New Orleans, on the Mississippi; Cincinnati and Cairo, on the Ohio; Nashville, on the Cumberland; Johnsonville, on the Tennessee; Kansas City, on the Missouri; Little Rock, on the Arkansas; and Shreveport, on the Red.—*H. C. Frankenfield, Professor of Meteorology.*

\* Morning forecasts made at district center; night forecasts made at Washington, D. C.

† Morning and night forecasts made at district center.

**SPECIAL ARTICLES, NOTES, AND EXTRACTS.**

**A GRADUATE SCHOOL OF METEOROLOGY.**

The Association of American Agricultural Colleges and Experiment Stations has adopted one of the wisest plans conceivable for the increase and diffusion of sound knowledge relative to agriculture, i. e., the establishment of a graduate or post-graduate school, in which lectures and experiments by experts and specialists bring home to interested audiences the present

state of our knowledge, the trend of current thought, and the outlook for the future.

The third session of this school was held at Ithaca under the auspices of the New York Agricultural Experiment Station, July 6-31, 1908. The program shows that the instructors and students were kept very busy with their lectures and seminars; the latter are nearly equivalent to the laboratory work of the botanical, physical, and chemical laboratories, in